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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,595	02/03/2004	Ashley Stuart Davis		1135

7590 09/15/2005

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EXAMINER	
LUKTON, DAVID	

ART UNIT	PAPER NUMBER
1654	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/771,595	DAVIS ET AL.	
	Examiner	Art Unit	
	David Lukton	1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-24* is/are pending in the application.

4a) Of the above claim(s) *23 and 24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

5.88

Pursuant to the directives of the response filed 7/12/05, claims 1-5 have been cancelled, and claims 6-24 added.

Applicants election of Group I with traverse is acknowledged, as are the species elections. Applicants have argued that claims 23-24 should be rejoined with the elected group. However, the composition claims (23-24) do not require any particular purpose of the sucrose. The sucrose could be used, for example, to effect a density gradient centrifugation, without regard to stability of the composition. Further, when claims are presented to a composition and a method of use (or method of making), and applicant elects the method, the examiner bears no obligation to examine claims drawn to the composition. Nevertheless, the possibility of rejoinging claims 23-24 would be considered if applicants were willing to make an admission, specifically, that if a reference renders obvious (or anticipates) the composition of claim 23, then that reference will also render obvious any of the Group I claims. But as matters currently stand, the restriction requirement is still deemed to be proper.

Claims 6-22 are examined in this Office action. Claims 23-24 are withdrawn from consideration.

✦

Claims 6-22 are rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 6 is indefinite as to the manifestations of "stability". Is it reduction (or absence) of polymerization? Reduction of de-polymerization? Absence of aggregation? Structural integrity? *In vitro* biochemical activity? Also, is it sufficient that one component of the composition be stabilized, e.g., the sucrose or the ATP...?

- In claim 7, the phrase "the composition of step (b)" lacks literal antecedent basis. The same issue applies in the case of claim 8. Perhaps the terms *first compostion* and *second composition* could be used in some way.

- In claim 9, the phrase "said frozen composition" lacks literal antecedent basis.

- In claim 12, it is unclear which of the various compositions is being referred to.

- Claim 17 makes reference to "said composition". Is this the composition of step (a) or the composition of step (b)...?

- Claim 18 makes reference to a concentration of sucrose. Is this the amount that is present after the mixing procedure of step (b), or was there some sucrose present before the mixing? The same issue applies in the case of claim 19.

- Claim 20 makes reference to "A-buffer". If this term is going to be used, it should be defined in the claims.

- In claim 20, the phrase "the lyophilized actin" lacks antecedent basis.

- In claim 20, the phrase "said resuspended actin" lacks antecedent basis.

- In claim 22, the phrase "said actin" lacks antecedent basis. Is this the "actin composition" or the "resuspended actin", or some other form of actin? And was the pyrenyl group removed at some point?

✦

The following is a quotation of 35 USC. §103 which forms the basis for all obviousness rejections set forth in the Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.
>
> This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made, absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

Claim 24 is rejected under 35 U.S.C. §103 as being unpatentable over Drenckhahn (*J. Biol. Chem.* **261**, 12754, 1986).

Drenckhahn discloses methods of using pyrene-actin to study rates of elongation of pyrene-labelled filaments. Also disclosed (e.g., page 12755, col 1, paragraph 2) is that sucrose inhibit elongation of actin filaments.

The issue here pertains to the manifestations of "success" in achieving stability of the pyrene actin. Claim 24 can be interpreted to mean that the mere combination

of pyrene actin with sucrose is tantamount to the attainment of stability, regardless of what experimentally manifest changes may occur in spite of the combination. In this respect, the requirements of the claim are met, since Drenckhahn does teach the requisite contacting step (pyrene-actin + sucrose).

Alternatively, claim 24 could be interpreted to mean that if polymerization of pyrene actin is reduced by the sucrose, the conditions of the claim are met. Even by this test, the disclosure of the reference qualifies.

Thus, the claim is rendered obvious.

✦

References 1-3 were stricken from the IDS, since a copy of these was not received.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lukton whose telephone number is 571-272-0952. The examiner can normally be reached Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell, can be reached at (571)272-0974. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

D. Lukton

DAVID LUKTON
PATENT EXAMINER
GROUP 1800